Issuance Date: September 23, 2002
Effective Date: November 01, 2002
Expiration Date: November 01, 2007

AIR OPERATING PERMIT 000093-1

In compliance with the provisions of The State of Washington
Clean Air Act Chapter 70.94 Revised Code of Washington

Kaiser Aluminum & Chemical Corporation
Tacoma Works
3400 Taylor Way
Tacoma, Washington 98421

is authorized to operate in accordance
with the terms and conditions
of this permit.

Issued by:

State of Washington
DEPARTMENT OF ECOLOGY
300 Desmond Drive
P.O. Box 47600
Olympia, Washington 98504-7600

Prepared and Reviewed by:

Eric Oie, PE
Environmental Engineer

Approved by:

Carol Kraege, P.E.
Industrial Section Manager

Table of Contents

SECTION I: INTRODUCTION AND LEGAL AUTHORITY

This Air Operating Permit is issued under the procedures established in the Operating Permit Regulation, Chapter 173-401 WAC (Washington Administrative Code). The provisions of this permit describe the emissions limitations, operating requirements, emission monitoring, record keeping requirements, and reporting frequencies for the permitted source. Terms used in this permit have the meaning assigned to them in the referenced regulations.

Kaiser Aluminum & Chemical Corporation Tacoma Works requires a Chapter 173-401 WAC Air Operating Permit because Kaiser emits or has the potential-to-emit, one hundred tons per year or more of one or more air pollutants as evidenced by Kaiser's annual emission inventories and Kaiser's monthly air emission reports. [WAC 173-401-300(1)]

All terms and conditions except state-only requirements are enforceable under the Federal Clean Air Act (FCAA). State-only requirements are specifically identified in the permit.

SECTION II: SPECIFIC TERMS AND CONDITIONS OF THE PERMIT

The permittee is subject to the respective requirements in each of the tables for the specific processes (pages 13 through 74) and is also subject to all the facility-wide generally applicable requirements (pages 5 through 12). Insignificant emission units (IEUs) and activities are subject to the applicable requirements contained in the facility–wide generally applicable requirements, however, they are not subject to testing, monitoring, recordkeeping, reporting and certification requirements unless the generally applicable requirements in the State Implementation Plan (SIP) impose them [WAC 173-401-530(2)(c)].

During periods of total facility curtailment (100% of smelting operations are shut down), monitoring, inspections, and recordkeeping requirements can be discontinued if the permittee makes a contemporaneous record in a log or file maintained on site of the date and time of total facility curtailment. Within 30 days of total curtailment, the permittee must provide a written notice to Ecology of the date and time of total curtailment. Reporting requirements shall remain in effect. Upon start-up of the curtailed smelting operations, all requirements in this permit shall come back into effect.

Facility-wide Generally Applicable Requirements:

The applicable requirements, test methods, and associated monitoring, recordkeeping and reporting requirements in the "Facility-wide Generally Applicable Requirements" table (pages 5 through 12) apply facility-wide, in addition to a more restrictive condition contained in II.2 to II.6.

Process Specific Applicable Requirements:

This permit categorizes permit conditions according to Kaiser's aluminum smelter processes. Specifically, paste plant permit conditions are contained in Table II.2; potroom operation permit conditions are contained in Table II.3; metal products (cast house operations) permit conditions are contained in Table II.4; ancillary operations permit conditions are contained in Table II.5; and maintenance operations permit conditions are contained in Table II.6.

The emission units identified in these tables II.2 - II.6 are the emission units that are subject to specific requirements in addition to the generally applicable facility-wide requirements (on pages 5 through 12).

In column 2 (Applicable Requirement), the more stringent, or specific of multiple citations is listed first. Less stringent, or less specific citations are listed below the higher order requirement (typed in italicized font). [WAC 173-301-600].

II.1. Facility-Wide Generally Applicable Requirements

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
1.1.a	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91] *WAC 173-400-040(1)*	Visible Emissions Must not exceed an average of 20% opacity for more than six consecutive minutes in any 60-minute period.	Upon Ecology's request, the permittee shall conduct an emission test. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). Once per calendar year, designated operational employees in each process must be trained to look for any visible emissions (VE) of any level or quantity and to notify specified staff assigned to track, evaluate and correct visible emission events. Maintain training records. Once per seven-day period or calendar week, designated staff responsible for VE observations must conduct plant-wide inspections looking for visible emissions of any level or quantity. (Plant-wide is defined as all non-insignificant emission units and material handling equipment in each process area.) Record the VE observations from weekly inspections, initiate corrective action, if needed, and record the notification and the action taken. Initiate corrective action within 24 hours when any VE is observed. Maintain records of each inspection, observations made, and each notification by operational employees; results of investigation of notification; corrective action taken, if any, in response to the notification; and the time the action was initiated and completed. If corrective actions are not completed within 24 hours of VE observation, notify Ecology at first opportunity during normal office hours. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
1.1.b	WAC 173-400-040(2) [effective 3/22/91; not submitted for SIP approval] State-only requirement	Fallout No person shall cause or permit the emission of particulate matter from any source to be deposited beyond the property under direct control of the permittee in sufficient quantity to interfere	The permittee shall conduct investigations of any reports of excessive fallout and maintain records of: (1) each report of fallout by operational staff or complaint of excessive fallout received; (2) the results of the investigation into the validity and/or cause of the excessive fallout; (3) corrective action taken, if any, to eliminate the excessive fallout; and (4) the time the action was initiated and completed. The permittee shall initiate corrective action within 24 hours of complaint when any valid complaint is received. If corrective actions are not completed within 24 hours of complaint receipt, notify Ecology at first opportunity during normal office hours. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.1. Facility-Wide Generally Applicable Requirements

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		unreasonably with the use and enjoyment of the property upon which the material is deposited.	
1.1.c	WAC 173-415-030(4) [effective 3/22/91; approved into the SIP on 2/19/91] *WAC 173-400-040(3)(a)*	Fugitive Emissions The permittee shall use RACT to prevent fugitive emissions.	In an ongoing basis, the permittee shall designate operational employees in each process to look for fugitive emissions (particulate, fumes, gases, aerosols and mists) and notify specified staff assigned to track, evaluate and correct fugitive emission events. Weekly, the permittee shall conduct an inspection, record the observations, initiate corrective action, if needed, and record the notification and the action taken. If corrective actions are not completed within 24 hours of observation, notify Ecology at first opportunity during normal office hours. Weekly inspections for fugitive emissions may be conducted concurrently with weekly inspections for visible emissions as specified in Condition No. 1.1.a. Minimum requirements for reasonable precautions to control fugitive emissions may include but are not limited to: using dust suppressant agents (water, lignosulfate, etc.); minimizing emissions from material transfer and conveyance systems; keeping building doors, vents, openings closed; in the paste plant ensure that the shrouds and hoods are in place, etc. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
1.1.d	WAC 173-400-040(4) [3/22/91; not submitted for SIP approval] State-only Requirement	Odor Permittee must use recognized good practice and procedures to reduce odors which may unreasonably interfere with any other property owner's use and enjoyment of his property to a reasonable minimum,.	The permittee shall conduct investigations of any reports of odor and maintain records of: (1) each report of odor by operational staff or complaint of odors received; (2) the results of the investigation into the validity and/or cause of the odors; (3) corrective action taken, if any, to eliminate or reduce the odor; and (4) the time the action was initiated and completed. The permittee shall initiate corrective action within 24 hours of complaint when any valid complaint is received. If corrective actions are not completed within 24 hours of complaint receipt, notify Ecology at first opportunity during normal office hours. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.1. Facility-Wide Generally Applicable Requirements

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
1.1.e	WAC 173-400-040(5) [3/22/91; approved into the SIP on 8/20/93]	Emissions Detrimental to Persons or Property Permittee shall not cause or permit the emissions of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business	The permittee shall conduct investigations of any reports of detrimental emissions and maintain records of: (1) each report of detrimental emissions by operational staff or complaint of detrimental emissions received; (2) the results of the investigation into the validity and/or cause of the detrimental emissions; (3) corrective action taken, if any, to eliminate or reduce the detrimental emissions; and (4) the time the action was initiated and completed. The permittee shall initiate corrective action within 24 hours of complaint when any valid complaint is received. If corrective actions are not completed within 24 hours of complaint receipt, notify Ecology at first opportunity during normal office hours. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.1. Facility-Wide Generally Applicable Requirements

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
1.1.f	WAC 173-415-030(5)(a) [3/22/91; approved into the SIP on 2/19/91]	Sulfur Dioxide - Mass Limit Total emissions of sulfur dioxide from all emissions units shall not exceed sixty pounds of sulfur dioxide per ton of aluminum produced on a monthly average.	Upon Ecology's request, the permittee shall conduct emission testing. The reference test method is EPA Test Method 6 (40 CFR Part 60, Appendix A, 7/1/99) The permittee shall analyze each incoming load or batch of coke and pitch for sulfur content using the procedures in ASTM D4239. Measure aluminum production daily. Calculate sulfur dioxide emissions from a mass balance calculation (making the assumption that all sulfur converts to sulfur dioxide), using a weighted daily aluminum production rate for the period of concern, and using a weighted average sulfur content representative of all raw materials consumed during the period of concern. The permittee shall calculate the sulfur dioxide emission rate by the following equation: Pounds SO_2/ton Al = $(\Sigma C x S_C + \Sigma P x S_P + \Sigma O x S_O) \times 40/Al$ where C, P, and O are the coke, pitch, and fuel oil usage during the month from each shipment, in tons; S_C, S_P, and S_O are the sulfur concentration of each shipment of coke, pitch or fuel oil respectively, expressed as a percentage; and Al is the aluminum production for the month. Monthly, the permittee shall submit the Pounds SO_2/ton Al. The submission must include records of raw material usage, representative raw material sulfur analysis, and aluminum production rate. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.1. Facility-Wide Generally Applicable Requirements

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
1.1.g	WAC 173-415-030(5)(b) [3/22/91; approved into the SIP on 2/19/91] *WAC 173-400-040(6), first paragraph*	Sulfur Dioxide - Concentration Limit The permittee shall not cause or permit the emissions of a gas containing sulfur dioxide in excess of 1000 ppm corrected to dry standard conditions for an hourly average.	Upon Ecology's request, the permittee shall conduct an emission test. The reference test method is EPA Test Method 6 (40 CFR Part 60, Appendix A, 7/1/99) The permittee shall comply with Condition No. 1.1.f. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
1.1.h	WAC 173-400-040(8)(a) [effective 3/22/91; approved into the SIP on 8/20/93]	Fugitive Dust The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the source to minimize emissions.	The permittee shall comply with Condition No. 1.1.c. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
1.1.i	WAC 173-400-050(1) [effective 3/22/91; approved into the SIP on 8/20/93] And WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any combustion and incineration unit and from any general process operations shall not exceed 0.1 grains/dscf.	The permittee shall conduct an emission test at Ecology's request, and at the frequency outlined in the process tables (tables II.2 - II.6) for the respective units subject to this requirement. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99); or EPA Method 301 Equivalent (40 CFR Part 63, Appendix A, 7/1/99). [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
1.1.j	Order No. 98AQ-I024, First Amendment [effective 10/23/98] *WAC 173-415-030(1)(a)*	Fluorides Monitoring program for fluorides emitted to the ambient air.	The permittee shall conduct forage sampling and monitoring on a monthly basis during the growing season (March 1 to October 31) at the existing Station "M" forage and/or grazing sampling site. At the close of the calendar year 2001 growing season, the data from the 1999, 2000, and 2001 growing seasons shall be reviewed. If, during this period, monitoring results have not exceeded 50% of

II.1. Facility-Wide Generally Applicable Requirements

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
	[effective 3/22/91; not submitted for SIP approval *WAC 173-481-150* State-only requirement	An exceedance of the forage standard using a standardized grass culture shall be considered a violation of the respective standard in Chapter 173-481 WAC. Additionally, failure to maintain and operate the standardized grass cultures in accordance with the protocol shall be considered a failure to monitor violation.	the forage standards contained in Chapter 173-481 WAC, as defined below, the permittee may discontinue forage monitoring. If total fluoride emissions during the growing season (average pounds per day) from the permittee remain at 1998 levels, Ecology may reinstate the monitoring requirements. Not exceeding 50% of the forage standards are defined as follows: No monthly fluoride ion results exceeding 40 ppm more than once in any two consecutive months, and; No monthly fluoride ion results exceeding 30 ppm each month for more than two consecutive months, and; No twelve consecutive month fluoride ion average result exceeding 20 ppm. The permittee shall adhere to the Standardized Grass Culture for Atmospheric Biomonitoring (as Modified at Boyce Thompson Institute, Ithaca, NY), 10 June 1991 for any necessary forage sampling and monitoring required by this order. Washing of the forage is not allowed. The permittee shall adhere to ASTM D3269-96, Standard Test Methods for Analysis for Fluoride Content of Atmosphere and Plant Tissues (Manual Procedures).
1.1.k	Order No. 98AQ-I024, First Amendment [effective 10/23/98 *WAC 173-415-060(1)(a), (b), (d), and (e) [effective 3/22/91; not submitted for SIP approval]* *WAC 173-481-150* State-only requirement	Monitoring of ambient air, forage, fluoride emissions and other air data as specified.	The permittee shall comply with Condition No. 1.1.j.
1.1.l	Order No. 98AQ-I024, First Amendment [effective 10/23/98]	Forage standards Sampling must be conducted in locations and	The permittee shall comply with Condition No. 1.1.j.

II.1. Facility-Wide Generally Applicable Requirements			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
	WAC 173-481-100 [effective 9/16/87; not submitted for SIP approval State-only Requirement	during time periods consistent with protecting livestock and vegetation. Fluoride content must not exceed: - an average of 40 ppm for any 12 consecutive months; - 60 ppm for each month for more than 2 consecutive months. - 80 ppm more than once in any 2 consecutive months - In areas where cattle are not grazed continually, but are fed cured forage part of the year, the fluoride content of the cured forage shall be used as the forage fluoride content for as many months as it is fed to establish the yearly average. - Cured forage grown for sale as livestock feed shall not exceed 40 ppm by dry weight after curing or preparing for sale.	
1.1.m	Order No. 98AQ-I024, First Amendment [effective 10/23/98] *WAC 173-481-110(1) [effective 9/16/87; not submitted for SIP approval]*	Ambient standards Sampling must be conducted in locations and during time periods consistent with protecting livestock and vegetation.	No monitoring required.

II.1. Facility-Wide Generally Applicable Requirements

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
	State-only requirement	Gaseous fluorides in the ambient air calculated as HF must not exceed: - 3.7 ug/m^3 for any 12 consecutive hours; - 2.9 ug/m^3 for any 24 consecutive hours; - 1.7 ug/m^3 for any 7 consecutive days; - .84 ug/m^3 for any 30 consecutive days; - 0.50 ug/m^3 average for the period from March 1 through October 31 of any year.	
1.1.n	WAC 173-415-030(6) [3/22/91; approved into the SIP on 2/19/91]	Operation and maintenance Consistent with Good Air Pollution Control Practices At all times, including periods of abnormal operation and upset, the permittee must operate and maintain air pollution control equipment in a manner consistent with good air pollution control practice.	Annually, designated operational employees in each process shall be trained in work practices that are consistent with the design and proper operation of each emission unit so that good air pollution control practice is maintained. Maintain training records. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.2 Paste Plant

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
2.1.a Coke/Coal transfer baghouse, equipment # 71462, 3,000 cfm	Condition No. I.2.A and I.2.B of Order No. DE 98-AQI020 *WAC 173-400-060*	Particulate Material Particulate material emissions must not exceed: 0.005 grains/dscf; 3.1 pounds/day; and 0.55 tons/year	The permittee shall conduct an emission test once every two years and upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99), or EPA Method 301 equivalent. Calculate the particulate material emission rate using the following equations: $E_{PPD} = C \times Q \times K$ Where: E_{PPD} = the emission rate of PM in lb/day; C = the concentration of PM in gr/dscf; Q = the volumetric flow rate of effluent gas in dscf/min; K = conversion factor 0.2057 lb-min/gr-day; $E_{TPY} = C \times Q \times K$ Where: E_{TPY} = the emission rate of PM in tons/year; C = the concentration of PM in gr/dscf; Q = the volumetric flow rate of effluent gas in dscf/min; K = conversion factor 0.2057 ton-min/gr-year; Include all valid runs in the calculations. The permittee shall report emission results to Ecology within 30 days of emission testing, and all supporting data from calculation and units and dates tested on a summary sheet.
2.1.b Coke/Coal transfer baghouse,	Condition No. I.2.C of Order No. DE 98-AQI020 *WAC 173-415-030(3)*	Visible Emissions Opacity must not exceed an average of five percent for any six consecutive minutes	The permittee shall, upon Ecology's request, conduct an emission test. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-

II.2 Paste Plant			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
equipment # 71462, 3,000 cfm		in any sixty-minute period.	630(1)]
2.1.c Coke/Coal transfer baghouse, equipment # 71462, 3,000 cfm	Condition No. I.2.C of Order No. DE 98-AQI020	No visible emissions shall be present elsewhere in the system.	Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
2.1.d Coke/Coal transfer baghouse, equipment # 71462, 3,000 cfm	Condition No. I.3 of Order No. DE 98-AQI020	Operation & Maintenance Manuals Operation & maintenance manuals for all equipment that has the potential to effect emissions to the environment shall be followed, reviewed regularly, updated as necessary and available to Ecology. Emissions that result from a failure to follow the requirements of the manuals may be considered proof that the equipment was not properly operated and maintained.	The permittee shall keep on file the operation & maintenance manual and regular maintenance records. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
2.1.e Coke/Coal transfer baghouse,	Condition No. I.4 of Order No. DE 98-AQI020	Conduct inspections using an inspection log of the dust collector/baghouse unit. Maintain the inspection log.	The permittee shall conduct weekly inspections of the slide chutes, belt cleaners, screw conveyor and baghouse. Maintain an inspection log of observations.

II.2 Paste Plant

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
equipment # 71462, 3,000 cfm			
2.1.f Coke/Coal transfer baghouse, equipment # 71462, 3,000 cfm	Condition No. I.5 of Order No. DE 98-AQI020	Particulate Material Ecology may require source tests if visible emissions are observed or upon failure to maintain the inspection log, with a report to follow 30 days after testing.	Upon Ecology's request, the permittee shall conduct an emission test if visible emissions, of any level or quantity, are observed or upon failure to maintain the inspection log. The permittee shall submit a written report to Ecology within 30 days of testing.
2.2 Material Preparation Baghouse, equipment # 71030, 13,000 cfm	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once per year and upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99), or EPA Method 301 equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. The permittee shall record the time and duration of visible emissions during the particulate matter emission test. The permittee shall comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
2.3.a Pitch fume collection system/High efficiency air filtration (HEAF), equipment # 71020, 9,000 cfm	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once every two years and upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99), or EPA Method 301 equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. The permittee shall comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
2.3.b Pitch fume collection system/High	Order No. DE 99AQIS-114 and Order No. DE 99AQIS-114, First Amendment	Operation and Maintenance Daily Operations Check for HEAF Scrubber System	Each day the Paste Plant is in operation, a daily operations check of the HEAF unit is to be performed and recorded on the HEAF Daily Operations Check data sheet. The HEAF Daily Operations Check, specified in this Condition, is intended to be a record for one calendar month.

II.2 Paste Plant			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
efficiency air filtration (HEAF), equipment # 71020, 9,000 cfm			The HEAF Daily Operations Check must be performed at least once every 24-hour period that the Paste Plant is in operation. The daily operations check does not need to be done during "down days." At the end of each month, the completed form is to be sent to the Plant Environmental Engineer for filing for at least three years. A copy of the completed form will be maintained by the Paste Plant as backup and sent to Ecology with an air monitoring report monthly. On the checklist form, the following information is to be recorded: 1. Date: Date the daily operations check; 2. HEAF Media: inspect the HEAF filter media for: a. holes; b. sufficient media on the roll for the shift; c. proper alignment of the media in the HEAF cabinet. After installing a new filter media roll, the roll must be inspected, by a trained qualified person, to ensure no damage occurred to the media during installation. If damage has occurred, the filter media must be unrolled past the damaged section; if this is not possible, the roll must be replaced. 3. HEAF Room: Inspect the HEAF unit and room for leaking coal tar pitch oil and any potential operational problems. Inspect the three pressure gauges. Correct any problems or contact maintenance; 4. Pressure Drop: Record the HEAF unit air pressure drop; 5. Comments: Add comments about actions taken to correct the above items; 6. Operator's name and Initials: The operator performing the daily operations check is to print his/her name and initial the sheet. The HEAF Unit is an essential part of the Paste Plant's environmental systems. If the HEAF Unit is not operating within acceptable standards, or shuts down for any reason, the Paste Plant must be shut down until the problem is corrected.
2.4.a Paste Plant	40 CFR Part 63.843(b)	POM Operate and maintain equipment to capture and control POM emissions from the paste plant.	The permittee shall comply with 2.4.b (parametric monitoring) and 2.4.c (daily inspection).

II.2 Paste Plant

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
2.4.b Paste Plant	40 CFR Part 63.848(f) and 40 CFR Part 63.847(h)	Parametric Monitoring Operate, calibrate and maintain a continuous parameter monitoring system for the paste plant emission control device. The hourly average temperature in the high efficiency air filtration (HEAF) unit stack shall not exceed 95^{o}F The hourly average air flow in the HEAF unit stack shall not be less than 5100 acfm. The pressure drop shall be between 18 in. w.g. and 37 in. w.g. The permittee may re-determine the upper and/or lower operating limits, as appropriate, based on historical data or other information and submit an application to Ecology to change the applicable limits(s).	At least once each day the permittee shall inspect the control device to ensure the control device is operating properly and record the results of each inspection. Continuously monitor and record stack temperature. Continuously monitor and record stack air flow. Continuously monitor and record pressure drop.

II.2 Paste Plant

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
2.4.c Paste Plant	40 CFR Part 63.848(g)	Visible Emissions Visually inspect the exhaust stack of the control device on a daily basis for evidence of any VE indicating abnormal operation.	Daily, the permittee shall visually inspect the control device stack for any visible emissions indicating abnormal operation.
2.4.d Paste Plant	40 CFR Part 63.848(h)	Corrective Action If a monitoring device for a primary control device measures an operating parameter outside the limits established under condition 2.4.b [40 CFR Part 63.847(h)], or if visible emissions indicating abnormal operation are observed from the exhaust stack of a control device during a daily inspection the permittee shall initiate corrective action procedures identified in the startup, shutdown and malfunction plan within one hour.	Within one hour of identification of a problem, the permittee shall initiate the corrective action procedures identified in the startup, shutdown and malfunction plan.
2.4.e Paste Plant	40 CFR Part 63.848(i)	Exceedences No operating parameter limit contained in 2.4.b shall be exceeded more than six times in any semiannual period. No more than one exceedence shall be attributed to any given 24 hour period.	The permittee shall submit a semiannual summary report. The first and all subsequent summary reports shall include the dates of each exceedence outside the normal operating ranges and the magnitude of each exceedence. The report shall also identify exceedances of any given operating parameter six or more times in any semiannual period.

II.2 Paste Plant

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
2.4.f Paste Plant	40 CFR Part 63.848(k)	Accuracy and Calibration Submit recommended accuracy requirements for review and approval of all monitoring devices required by conditions 2.4.b through 2.4.e [40 CFR Part 63.848]. The submittal must be certified by the permittee to meet the accuracy requirements and must be calibrated in accordance with manufacturer's instructions.	The permittee shall submit recommended accuracy requirements for review and approval within 90 days of permit issuance and within 90 days of any changes made to monitoring devices that may affect their accuracy.
2.4.g Paste Plant	40 CFR Part 63.850(c) and 40 CFR Part 63.6(e)(3)	Startup, Shutdown and Malfunction Plan and Reports The permittee shall develop and implement a written plan as described in 40 CFR Part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the (MACT) standard.	Within 90 days of permit issuance, the permittee shall develop a written plan that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the MACT emission standards. In addition to the information required in 40 CFR Part 63.6(e)(3), the plan shall include: (1) procedures, including corrective actions, to be followed if a monitoring device measures an operating parameter outside the limits established in Condition No. 2.4.b, or if visible emissions from an exhaust stack indicating abnormal operation of a control device are observed by the owner or operator during the daily inspection required in Condition No. 2.4.c; and (2) the permittee shall also keep records of each event as required by 40 CFR Part 63.10(b) and record and report if an action taken during startup, shutdown, and malfunction is not consistent with the procedures in the plan as described in 63.6(e)(3)(iv).

II.2 Paste Plant

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
2.4.h Paste Plant	40 CFR Part 63.850(e)	Recordkeeping The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR Part 63.10(b) and 40 CFR Part 63.850(e)	

II.3 Potroom Operations

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.1.a Combined emissions from dry scrubber and roof vent monitors	WAC 173-415-030(2)	Particulate The total emission of particulate matter to the atmosphere from the reduction process (potlines) shall be reduced to the lowest level consistent with reasonably available control technology for primary aluminum plants. The emission of solid particulate shall not exceed fifteen pounds per ton of aluminum produced on a daily basis.	The permittee shall conduct at least three valid random source tests per calendar month for each operating potline. Each source test shall be for a duration of at least one pot cycle. The reference test methods are EPA Test Method 14 (40 CFR Part 60 Appendix A, 7/1/99), and Test Method 5 or 17 (40 CFR Part 60 Appendix A, 7/1/99). The reference test methods shall be used for all sampling. Particulate sampling concurrent with MACT sampling is also acceptable. For dry scrubber emissions, the permittee shall sample one reactor per operating potline per month. All four stacks of each reactor shall be sampled for each reactor test. EPA's Test Method 5 or 17 (40 CFR Part 60 Appendix A, 7/1/99) shall be used for sampling. Conduct each test for a minimum of 6 hours. Calculate the particulate matter emission rate from the potlines using the following equation: $E_p = [(C_{s1} \times Q_{sd})_1 + (C_{s2} \times Q_{sd})_2]/(P \times K)$ Where: E_p = the emission rate of PM from a potline in lb/ton; C_{s1} = the concentration of PM from the primary control system in mg/dscf; Q_{sd} = the volumetric flow rate of effluent gas corresponding to the appropriate subscript location in dscf/hr; C_{s2} = the concentration of PM as measured for the roof monitor emissions in mg/dscf; P = the aluminum production rate in ton/hr as determined by dividing the number of hours in the calendar month into the weight of aluminum tapped from the potline during the calendar month that includes the three runs of a performance test; K = conversion factor 453,600 mg/lb; Include all valid runs in the calculation. The permittee shall report results monthly, and all supporting data from calculation and units and dates tested on a summary sheet. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.3 Potroom Operations

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.1.b Combined emissions from dry scrubber and roof vent monitors	Condition No. 1 of Order No.DE 95-AQI032, and Condition No. 1, 2 and 3 of Order No. DE 95 AQI012	PM10 PM10 emissions from the potrooms and dry scrubbers must not exceed 415 kg per day.	At the direction of Ecology, at least once per calendar year, measure PM10 emissions from the potrooms and dry scrubbers simultaneously from the Line 1 or 2 EPA Test Method 14 monitoring system, the Line 4 EPA Test Method 14 monitoring system, a representative Line 1 or Line 2 dry scrubber reactor (4 stacks), and a representative Line 4 dry scrubber reactor (4 stacks). Simultaneous sampling shall be conducted for 24 hours; shall include sample trains for each of the eight reactor stacks and two Method 14 roof monitor ducts; and shall be done in accordance with EPA Method 201A (40 CFR Part 51 Appendix M, 7/24/90), including traversing of the stacks. PM10 emission testing shall be at the discretion of Ecology. After notification of the required testing, the permittee and Ecology shall agree on a time frame for completing the test. When calculating the total PM10 emissions from the potrooms, it is assumed that the volumetric air flow rate and PM10 concentration in the area of the roof monitor sampled by the EPA Test Method 14 monitoring system, is identical to the flow rate and the PM10 concentration in the remainder of the roof monitor(s) in the operating potroom (or potroom group). If the permittee is not notified before November 1st of each year of the required testing the permittee shall arrange for PM10 testing to be accomplished before the end of that year without further direction from Ecology. The permittee shall notify Ecology of the date of said testing. For PM10 testing, the permittee may elect to test each of the reactor stacks on a six-hour basis using the point of average velocity for each stack/duct. Should the permittee wish to conduct this sampling earlier in the calendar year the permittee can petition Ecology for permission, however, this will not relieve the permittee of the burden of fulfilling the required testing under this condition if Ecology exercises its discretion later in the year. Representative dry scrubber stacks shall be selected in accordance with the methodology agreed to by the permittee and EPA's OAQPS Emissions Measurement Branch for the Primary Aluminum MACT standards source testing program. The permittee shall submit the results of this testing along with their normal monthly air emissions report.

II.3 Potroom Operations

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.1.c Combined emissions from dry scrubber and roof vent monitors	WAC 173-415-030(6)	Operation and maintenance Consistent with Good Air Pollution Control Practices At all times, including periods of abnormal operation and upset, the permittee must operate and maintain air pollution control equipment in a manner consistent with good air pollution control practice.	Within 90 days of permit issuance or 90 days prior to startup, whichever is later, develop and implement a training plan that contains specific procedures to be followed for operating and maintaining the potlines in a manner consistent with good air pollution control practice. The purpose of the training program is to ensure that workers: (1) at all times operate and maintain the potlines, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions; and (2) are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants. The training plan, at a minimum, shall incorporate the following measures to employ good air pollution control practice: -Maintain doors in good repair, i.e. repair warps, gaps and holes, maintain top and bottom seals in good repair; -Minimize the duration of time the doors are opened, i.e. no unnecessarily open doors; -Minimize those emissions generated by work practices such as, but not limited to, ore feeding, crust breaking, paste addition, pin and channel pulling, flex raising, tapping and metal transfer from tapping to transport crucibles. -Ensure that dual flow dampers are used while doors are open and closed respectively on Lines I and II; -Develop and implement a pot fume collection and enclosure system repair policy -Ensure that the primary air control system is in good repair and operating properly; Annually train all potroom workers in this training program. Maintain employee training records in accordance with Sections III and IV of this permit. Once per week designated personnel shall conduct weekly inspections of each operating potroom using a checklist that incorporates, at a minimum, measures of the practices in the above paragraph. Initiate corrective action within 24 hours when any improper air pollution control practice is observed. Maintain records of each inspection, observations made;

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			and each notification, results of investigation of notification; corrective action taken, if any, in response to the notification, and the time the action was initiated and completed. If corrective actions to restore good air pollution practices are not completed within 24 hours notify Ecology at first opportunity during normal office hours. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.3 Potroom Operations

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.1.d.i Emissions from dry scrubbers and roof vent monitors	WAC 173-415-030(1)(b) State-only requirement	Collection Efficiency Each potline shall be designed so that the control of fluoride emissions will be equivalent to a total fluoride collection efficiency of eighty-five percent for horizontal stud soderberg pots.	The permittee shall conduct three random source tests per month in the roof vent of each operating potline. Each source test shall be for a duration of at least one pot cycle. EPA test methods contained in 40 CFR Part 60, Appendix A, 7/1/99, must be used. Sampling may be concurrent with MACT testing. The permittee shall test each dry scrubber inlet once per month using EPA test methods contained in 40 CFR Part 60, Appendix A, 7/1/99. Conduct each test for a minimum of 4 hours. Determine collection efficiency from the following equation: CSE = inlet/(inlet + roof emissions) * 100 Where: CSE = collection system (hooding) efficiency; Inlet = the mass per unit of time of gaseous fluoride in the inlet duct to the primary emission control system; Roof emissions = the mass per unit of time of gaseous fluoride in the potline's roof monitor. Monthly, the permittee shall report all supporting data from calculation, units tested and dates tested on a summary sheet. If, after twelve months of testing, the average of the twelve calculated CSE's minus two standard deviations is greater than eighty-five percent, the permittee may reduce this testing frequency to quarterly from monthly. If, after twelve months of testing, the average of the twelve calculated CSE's minus three standard deviations is greater than eighty-five percent, the permittee may eliminate this testing for the remainder of this permit's term. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.2.a Roof Monitor Emissions	Condition No. 2 of Order No. DE 95-AQI032 and Condition No. 4 of Order DE 95-AQI012	PM10 PM10 emissions measured at the roof monitors must not exceed 350 kg per day	Monthly, the permittee shall measure PM10 emissions from either Line 1 or 2 EPA Test Method 14 monitoring system, and the Line 4 EPA Test Method 14 monitoring system. Sampling shall be for a duration of either 48 hours or two contiguous 24 hour periods using EPA Test Method 201A. Sampling from the two Method 14 monitoring systems need not be simultaneous, and the permittee may sample from the point of average velocity rather than traversing the stack.
3.2.b	Condition No. 3 of Order No. DE 95-AQI032	Spent compressed air Spent compressed air from reduction cell crust breakers shall be exhausted at the vehicle rather than at the working face of the cell.	The permittee shall conduct weekly inspections in conjunction with the inspection required in Condition No. 3.1.c.
3.2.c Roof Monitor Emissions	Condition No. 5 of Order No. DE 95-AQI032	Anode vacuum Operate and maintain anode top dust vacuum cleaning systems on all potlines.	The permittee shall conduct weekly inspections in conjunction with the inspection required in Condition No. 3.1.c.
3.2.d Roof Monitor Emissions	Condition No. 6 of Order No. DE 95-AQI032	Dual-flow dampers Operate and maintain dual flow dampers on Lines I and II.	The permittee shall conduct weekly inspections in conjunction with the inspection required in Condition No. 3.1.c.
3.3 L1 Anode vacuum baghouse, equipment # 09140, 1500 cfm	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once every permit term and upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99) or EPA Method 301 Equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with the Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.4 L2 Anode vacuum baghouse, equipment # 09160, 1500 cfm			401-630(1)]
3.5.a L4 Anode vacuum baghouse, equipment # 14850, 1500 cfm	Condition No. II.2 of Order No. DE 98-AQI020 *WAC 173-400-060*	Particulate Material Emissions of particulate material shall not exceed: 0.005 grains/dscf; 1.55 pounds/day; and 0.30 tons/year	The permittee shall conduct an emission test once every permit term and upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99), or EPA Method 301 equivalent. Calculate the particulate material emission rate using the following equations: $E_{PPD} = C \times Q \times K$ Where: E_{PPD} = the emission rate of PM in lb/day; C = the concentration of PM in gr/dscf; Q = the volumetric flow rate of effluent gas in dscf/min; K = conversion factor 0.2057 lb-min/gr-day; $E_{TPY} = C \times Q \times K$ Where: E_{TPY} = the emission rate of PM in tons/year; C = the concentration of PM in gr/dscf; Q = the volumetric flow rate of effluent gas in dscf/min; K = conversion factor 0.2057 ton-min/gr-year; Include all valid runs in the calculations. The permittee shall report results monthly, and all supporting data from calculation and units and dates tested on a summary sheet.

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			Comply with Condition 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
3.5.b L4 Anode vacuum baghouse, equipment # 14850, 1500 cfm	Condition No. II.2 of Order No. DE 98-AQI020	Visible Emissions Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	The permittee shall, upon Ecology's request, conduct emission test. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
3.5.c L4 Anode vacuum baghouse, equipment # 14850, 1500 cfm	Condition No. II.2 of Order No. DE 98-AQI020	No visible emissions shall be present elsewhere in the system.	Comply with Condition 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
3.5.d L4 Anode vacuum baghouse, equipment # 14850, 1500 cfm	Condition No. II.3 of Order No. DE 98-AQI020	Operation and Maintenance Manuals Operation and maintenance manuals for all equipment that has the potential to effect emissions to the environment shall be followed, reviewed regularly, updated as necessary, and available to Ecology.	The permittee shall keep on file the operation & maintenance manual and regular maintenance records. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.5.e L4 Anode vacuum baghouse, equipment # 14850, 1500 cfm	Condition No. II.4 of Order No. DE 98-AQI020	Conduct inspections using an inspection log of the dust collector/baghouse unit.	An inspection log of the dust collector/bahouse unit shall be maintained. Inspections shall be conducted at least weekly. Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
3.5.f L4 Anode vacuum baghouse, equipment # 14850, 1500 cfm	Condition No. II.5 of Order No. DE 98-AQI020	Particulate Material Ecology may require source tests if visible emissions are observed or upon failure to maintain the inspection log, with a report to follow 30 days after testing.	Upon Ecology's request, the permittee shall conduct an emission test if visible emissions are observed or upon failure to maintain the inspection log. Submit a written report to Ecology within 30 days of testing.
3.6 L1&L2 unloading baghouse, equipment # 02270, 3,900 cfm	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once every two years and upon Ecology's request. The reference test method is EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99) or EPA Method 301 Equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
3.7 L1&L2 baghouse, equipment # 52910, 4800 cfm			

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.8 L4 bucket elevator baghouse, equipment # 04150, 4,550 cfm			
3.9 Baghouse, equipment # 04160, 2,100 cfm			
3.10 Baghouse, equipment # 54880, 4,600 cfm			
3.11 Baghouse, equipment # 54860, 4,600 cfm			
3.12 L1&2 airlift baghouse, equipment # 52940, 1200 cfm	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once every permit term and upon Ecology's request. The reference test method is EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/99) or EPA Method 301 Equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.13 L1&L2 baghouse, equipment # 52920, 1,200 cfm			
3.14 Baghouse, equipment # 54890, 1700 cfm			
3.15 Baghouse, equipment # 54910, 1,200 cfm			
3.16 Baghouse, equipment # 54870, 1,200 cfm			
3.17.a Potlines	40 CFR Part 63.843(a)(1)(vii)	Total Fluoride Emissions of total fluoride to the atmosphere shall not exceed 2.7 pounds/ton of aluminum produced for each potline.	Monthly, the permittee shall determine emissions of total fluoride through Condition No. 3.17.f.
3.17.b	40 CFR Part 63.843(a)(2)(i)	Polycyclic Organic Matter Emissions of polycyclic organic matter to the	Monthly, the permittee shall determine emissions of polycyclic organic matter through Condition No. 3.17.g.

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		atmosphere shall no exceed 4.7 pounds/ton of aluminum produced for each potline.	
3.17.c	40 CFR Part 63.847(a)	Demonstrate initial compliance with the requirements.	The permittee shall demonstrate initial compliance with Condition Nos. 3.17.a and 3.17.b upon startup.
3.17.d	40 CFR Part 63.7(b)(4)(i)	Performance Test Method Audit Samples	The permittee shall analyze performance audit (PA) samples during each performance test. The permittee shall request performance audit materials from Ecology 45 days prior to the test date.
3.17.e	40 CFR Part 63.847(c)	Initial Performance Test	Following approval of the site-specific test plan, the permittee shall conduct an initial performance test during the first month following the compliance date in accordance with Condition Nos. 3.17.f and 3.17.g. If a performance test has been conducted on the primary control system for potlines within 12 months prior to the compliance date, the results may be used to determine initial compliance.
3.17.f	40 CFR Part 63.847(d)(1) and 40 CFR Part 63.848(a)	Performance Test Requirements for TF Emissions from Potlines	The permittee shall measure and record the emission rate of total fluoride (TF) exiting the outlet of the primary control system for each potline and the rate of secondary emissions exiting through each roof monitor. The permittee shall conduct at least three runs per month from each potline's Method 14 monitoring system using Alcoa Test Methods 4075 and 4076 for a duration of a complete operating pot cycle. When conducting secondary emission testing, at least one run must be performed before the 15th of each month, at least one run must be performed after the 15th of each month and there must be at least six days between two of the runs during the month. Calculate the TF emission rate from each potline using the following equation: $E_p = [(C_{s1} \times Q_{sd})_1 + (C_{s2} \times Q_{sd})_2]/(P \times K)$ Where: E_p = the emission rate of TF from a potline in lb/ton; C_{s1} = the concentration of TF from the primary control system in mg/dscf; Q_{sd} = the volumetric flow rate of effluent gas corresponding to the

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			appropriate subscript location in dscf/hr; C_{s2} = the concentration of TF as measured for the roof monitor emissions in mg/dscf; P = the aluminum production rate in ton/hr as determined by dividing the number of hours in the calendar month into the weight of aluminum tapped from the potline during the calendar month that includes the three runs of a performance test; K = conversion factor 453,600 mg/lb; Include all valid runs in the calculation.
3.17.g	40 CFR Part 63.847(d)(2) and 40 CFR Part 63.848(b)	Performance Test Requirements for POM Emissions from Potlines	The permittee shall measure and record the emission rate of polycyclic organic matter (POM) exiting the primary emission control system and the rate of secondary emissions exiting through each roof monitor. Conduct one run per month on each potline's Method 14 monitoring system for a duration of a pot cycle using EPA Test Method 315 (40 CFR Part 63 Appendix A, 7/1/99). Conduct three runs per year for each primary control system device using EPA Test Method 315. Calculate the POM emission rate from each potline using the following equation: $E_p = [(C_{s1} \times Q_{sd})_1 + (C_{s2} \times Q_{sd})_2]/(P \times K)$ Where: E_p = the emission rate of POM from a potline in lb/ton; C_{s1} = the concentration of POM from the primary control system in mg/dscf; Q_{sd} = the volumetric flow rate of effluent gas corresponding to the appropriate subscript location in dscf/hr; C_{s2} = the concentration of POM as measured for the roof monitor emissions in mg/dscf; P = the aluminum production rate in ton/hr as determined by dividing the number of hours in the calendar month into the weight of aluminum tapped from the potline during the calendar month that includes the three runs of a

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			performance test; K = conversion factor 453,600 mg/lb; Include all valid runs in the calculation. However, POM emission data collected during the installation and startup of a cathode shall not be included in C_s.
3.17.h	40 CFR Part 63.847(h)	Monitoring Parameters Determine the upper and/or lower operating limits, as appropriate, for each monitoring device for the emission control system from values recorded during each of the runs performed during the initial performance test and from historical data from previous performance tests conducted by MACT approved test methods. The permittee may re-determine the upper and lower operating limits, as appropriate, based on historical data or other information and submit an application to Ecology to change the applicable limit(s).	The permittee shall determine operating limits within 90 days of startup. See Condition No. 3.17.i and the applicable requirements of 40 CFR Part 63.848(f).
3.17.i	40 CFR Part 63.848(f)	Monitoring Parameters Install, operate, calibrate and maintain a continuous parameter monitoring system for each emission	The permittee shall inspect each control device at least once each operating day to ensure the control device is operating properly and record the results of each inspection. Continuously monitor alumina flow from each reactor.

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		control device. Alumina flow shall be between the range of: See condition No. 3.17.h. Air flow shall be between the range of: See condition No. 3.17.h	Continuously monitor air flow from each reactor.
3.17.j	40 CFR Part 63.848(g)	Visible Emissions	The permittee shall visually inspect the exhaust stack(s) of each control device on a daily basis for evidence of any visible emissions indicating abnormal operation.
3.17.k	40 CFR Part 63.848(h)	Corrective Action	Within one hour the permittee shall initiate the corrective action procedures identified in the startup, shutdown and malfunction plan: (1) If a monitoring device for a primary control device measures an operating parameter outside the limits established under condition 3.17.h [40 CFR Part 63.847(h)]; or (2) if visible emissions indicating abnormal operation are observed from the exhaust stack of a control device during a daily inspection.
3.17.l	40 CFR Part 63.848(i)	Exceedences No operating parameter limit contained in 3.17.h shall be exceeded more than six times in any semiannual period. No more than one exceedance shall be attributed to any given 24-hour period.	The permittee shall submit a semiannual summary report. The first and all subsequent summary reports shall include the dates of each exceedance outside the normal operating ranges and the magnitude of each exceedance. The report shall also identify exceedances of any given operating parameter six or more times in any semiannual period.
3.17.m	40 CFR Part 63.848(j)	Weight of Aluminum Install, operate and maintain a monitoring device to determine the daily weight of aluminum produced.	The permittee shall record the daily weight of aluminum produced per potline.
3.17.n	40 CFR Part 63.848(k)	Accuracy and Calibration Submit recommended	The permittee shall submit recommended accuracy requirements for review and approval within 90 days of startup and when any changes are made to monitoring devices affecting their accuracy.

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		accuracy requirements for review and approval of all monitoring devices required by conditions 3.17.a through 3.17.m [40 CFR Part 63.848]. The submittal must be certified by the permittee to meet the accuracy requirements and must be calibrated in accordance with manufacturer's instructions.	
3.17.o	40 CFR Part 63.849	Test Methods and Procedures The permittee shall use EPA test methods identified in 40 CFR Part 63.849.	The permittee shall comply with Condition No. 3.17.f and 3.17.g.
3.17.p	40 CFR Part 63.850(a)(6) and 40 CFR Part 63.7(g)(1)	Notification of Initial Compliance Status	The permittee shall submit notification upon startup.

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
3.17.q	40 CFR Part 63.850(a)(8)	Notification of Compliance Approach The permitttee shall develop and submit an engineering plan that describes the techniques that will be used to address the capture efficiency of the reduction cells for gaseous hazardous air pollutants in compliance with emission limits in 40 CFR Part 63.843, 63.844 and 63.846.	The permittee shall submit the engineering plan within the first year of startup.
3.17.r	40 CFR Part 63.850(b) and 40 CFR Part 63.7(g)(1)	Performance Test Reports The permittee shall submit a summary of all subsequent performance tests to Ecology on a annual basis.	The permittee shall submit a summary of all performance tests annually.
3.17.s	40 CFR Part 63.850(c) and 40 CFR Part 63.6(e)(3)	Startup, Shutdown and Malfunction Plan and Reports The permittee shall develop and implement a written plan as described in 40 CFR Part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown and malfunction and a program of corrective action for malfunctioning process and	Prior to startup, the permittee shall develop a written plan that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the MACT emission standards. In addition to the information required in 40 CFR Part 63.6(e)(3), the plan shall include: (1) procedures, including corrective actions, to be followed if a monitoring device measures an operating parameter outside the limits established in Condition No. 3.17.h, or if visible emissions from an exhaust stack indicating abnormal operation of a control device are observed by the permittee during the daily inspection required in Condition No. 3.17.j. The permittee shall also keep records of each event as required by 40 CFR Part 63.10(b) and record and report if an action taken during startup, shutdown, and malfunction is not consistent with the procedures in the plan as described in 63.6(e)(3)(iv)

II.3 Potroom Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		control systems used to comply with the (MACT) standard.	
3.17.t	40 CFR Part 63.850(d)	Excess Emissions Report The permittee shall submit a report if measured emissions are in excess of the applicable standard in accordance with 40 CFR Part 63.10(e)(3).	The permittee shall submit excess emissions reports in accordance with 40 CFR Part 63.10(e)(3)(v) semiannually unless quarterly reports are required as a result of excess emissions.
3.17.u	40 CFR Part 63.850(e)	Recordkeeping The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR Part 63.10(b) and 40 CFR Part 63.850(e).	

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
4.1.a No. 1 Melting Furnace	Condition No. V.1 of Order No. DE 98-AQI020 State-only requirement	Gas Usage Limits Gas usage for the rod mill must not exceed 134,000 therms per month and13.4 therms per 1000 pounds of rod produced per month. The limit of 13.4 therms per 1000 pounds of rod does not apply for months in which major furnace relining is conducted at the rod mill.	The permittee shall determine compliance with the therm limits by multiplying gas used for each calendar month by the current therm or BTU per volume rating provided by the gas supplier, and dividing this figure by the pounds of rod produced during the month. The permittee shall report gas used, current therm or BTU per volume, pounds of rod produced during the month and compliance results monthly.
4.1.b No. 1 Melting Furnace	Condition No. V.2 and V.3 of Order No. DE 98-AQI020 *WAC 173-415-030(3)* State-only requirement	Visible Emissions Opacity at the stack for No. 1 melt furnace must not exceed an average of five percent for any six consecutive minutes in any sixty minute period	The permittee shall conduct a visual inspection of the stack weekly. The unit is in compliance if no visible emissions are present. If visible emissions are present, immediately conduct an opacity compliance test using EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). Submit the results of this compliance test to Ecology within seven working days of the test.
4.1.c No. 1 Melting Furnace	Condition No. V.4 of Order No. DE 98-AQI020 State-only requirement	Operation and Maintenance Manuals Operation and maintenance manuals for the burner shall be followed, reviewed regularly, updated as necessary and made available to Ecology. Emissions that result from a failure to follow the	The permittee shall keep on file the operation & maintenance manual and regular maintenance records. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		requirements of the O&M manual may be considered proof that the equipment was not properly operated and maintained	
4.2.a Rod Forming Stack Mist Eliminator (4600 cfm)	Condition No. III.2 of Order No. DE 98-AQI020 *WAC 173-415-030(3)* State-only requirement	Visible Emissions Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	Upon Ecology's request, the permittee shall conduct an emission test. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
4.2.b Rod Forming Stack Mist Eliminator (4600 cfm)	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once every two years and upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/99), or EPA Method 301 equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
4.2.c Rod Forming Stack Mist Eliminator (4600 cfm)	Condition No. III.3 of Order No. DE 98-AQI020 State-only requirement	Operation & Maintenance Manuals Operation and maintenance manuals for all equipment that has the potential to effect emissions to the atmosphere shall be followed, reviewed regularly, updated as necessary, and available to Ecology. Emissions that result from a failure to follow the requirements of the O&M	The permittee shall keep on file the operation & maintenance manual and regular maintenance records. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		manual may be considered proof that the equipment was not properly operated and maintained.	
4.2.d Rod Forming Stack Mist Eliminator (4600 cfm)	Condition No. III.4 of Order No. DE 98-AQI020 State-only requirement	Inspections Maintain an inspection log of the emission unit and mist eliminator.	The permittee shall conduct a monthly inspection with a qualified person of the emission unit and mist eliminator. A qualified person is one who is familiar with operations and maintenance operations consistent with good air pollution control practices. Inspections shall be recorded on a form approved by Ecology.
4.2.e Rod Forming Stack Mist Eliminator (4600 cfm)	Condition No. III.5 of Order No. DE 98-AQI020 State-only requirement	Visible Emissions At Ecology's request, conduct an emission test if visible emissions are observed or upon failure to maintain the inspection log.	Upon Ecology's request or upon failure to maintain the inspection log required in 4.2.d, the permittee shall conduct an emission test. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). The permittee shall submit emission test results within 30 days of emission test.
4.3 Baghouse, equipment # 39200, 800 cfm	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once every permit term and upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99) or EPA Method 301 Equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
4.4 Baghouse, equipment # 39310, 1800 cfm			
4.5.a Cast house Emission Standards for Affected Sources and	40 CFR Part 63.1505(k)(1); Part 63.1505(i)(1); Part 63.1505(j)(2) and (3); Part 63.1505(i)(6); and Part 63.1505(j)(5)	Secondary Aluminum Processing Unit - Particulate Matter For each secondary aluminum processing unit, the permittee must not discharge or allow to be	On and after the date of approval of the operation, maintenance and monitoring (OM&M) plan, the permittee must comply with the emission limits calculated using the equation for PM. Use the following individual emission unit limits for calculating the PM emission limit for the SAPU: The permittee must not exceed 0.20 kg of PM per Mg (0.40 lb of PM per ton)

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
Emission Units		discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of: $$L_{CPM} = \frac{\sum_{i=1}^{n}(L_{tiPM} \times T_{ti})}{\sum_{i=1}^{n}(T_{ti})}$$ Where, L_{tiPM} = The PM emission limit for individual emission unit i for a group 1 furnace or for an in-line fluxer; T_{ti} = The feed/charge rate for individual emission unit i; and L_{cPM} = The PM emission limit for the secondary aluminum processing unit.	of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge (40 CFR Part 63.1505(i)(1)); and The permittee must not exceed 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge from an in-line fluxer (40 CFR Part 63.1505(j)(2)) except that these emission limits do not apply to an in-line fluxer that uses no reactive flux materials (40 CFR Part 63.1505(j)(3)). However, the permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge (40 CFR Part 63.1505(i)(6)), and, the permittee may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge (40 CFR Part 63.1505(j)(5)).
4.5.b Cast house Emission Standards for Affected Sources and Emission Units	40 CFR Part 63.1505(k)(2); Part 63.1505(i)(4); Part 63.1505(j)(1) and (3); Part 63.1505(i)(6); and Part 63.1505(j)(5)	Secondary Aluminum Processing Unit - Hydrogen Chloride For each secondary aluminum processing unit, the permittee must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess	On and after the date of approval of the operation, maintenance and monitoring (OM&M) plan, the permittee must comply with the emission limits calculated using the equation for HCl. Use the following individual emission unit limits for calculating the HCl emission limit for the SAPU: The permittee must not exceed 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge for a group 1 furnace (40 CFR Part 63.1505(i)(4)); and The permittee must not exceed 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge from an in-line fluxer (40 CFR Part 63.1505(j)(1)) except

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		of: $L_{CHCl} = \frac{\sum_{i=1}^{n} (L_{tiHCl} \times T_{ti})}{\sum_{i=1}^{n} (T_{ti})}$ Where, L_{tiHCl} = The HCl emission limit for individual emission unit i for a group 1 furnace or for an in-line fluxer; and L_{cHCl} = The HCl emission limit for the secondary aluminum processing unit.	that these emission limits do not apply to an in-line fluxer that uses no reactive flux materials(40 CFR Part 63.1505(j)(3)). However, the permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge(40 CFR Part 63.1505(i)(6)), and, the permittee may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge (40 CFR Part 63.1505(j)(5)).
4.5.c Cast house Emission Standards for Affected Sources and Emission Units	40 CFR Part 63.1505(k)(3); Part 63.1505(i)(3); and Part 63.1505(i)(6)	Secondary Aluminum Processing Unit - Dioxins and Furans For each secondary aluminum processing unit, the permittee must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:	On and after the date of approval of the operation, maintenance and monitoring (OM&M) plan, the permittee must comply with the emission limits calculated using the equation for D/F. Use the following individual emission unit limits for calculating the D/F emission limit for the SAPU: The permittee must not exceed 15 ug of D/F TEQ per Mg (2.1 x 10-4 gr of D/F TEQ per ton) of feed/charge from a group 1 furnace. This limit does not apply if the furnace processes only clean charge (40 CFR Part 63.1505(i)(3)). However, The permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge (40 CFR Part 63.1505(i)(6)).

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		$L_{CD/F} = \frac{\sum_{i=1}^{n} (L_{tiD/F} \times T_{ti})}{\sum_{i=1}^{n} (T_{ti})}$ Where, $L_{tiD/F}$ = The D/F emission limit for individual emission unit i for a group 1 furnace; and $L_{cD/F}$ = The D/F emission limit for the secondary aluminum processing unit.	
4.5.d Cast house Emission Standards for Affected Sources and Emission Units	40 CFR Part 63.1505(k)(4)	Secondary Aluminum Processing Unit The permittee may demonstrate compliance with the emission limits of Requirements 4.5.a to 4.5.c (40 CFR Part 63.1505(k)(1)-(3)) by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of 40 CFR Part 63.1505(i) and (j).	The permittee may demonstrate compliance with the emission limits of Requirements 4.5.a to 4.5.c by demonstrating compliance with the following individual emission unit limits: For a group 1 furnace that is not a melting/holding furnace processing only clean charge, the permittee must not exceed: 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge; and 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge; 15 ug of D/F TEQ per Mg (2.1 x 10-4 gr of D/F TEQ per ton) of feed/charge. The D/F limit does not apply if the furnace processes only clean charge (40 CFR Part 63.1505(i). For an in-line fluxer that uses no reactive flux material, the permittee must not exceed: 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge; and 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge (40 CFR Part 63.1505(j).
4.5.e	40 CFR Part 63.1506(b); and	Labeling	The permittee must inspect the labels for each group 1 furnace, group 2 furnace and in-line fluxer at least once per calendar month to confirm that posted labels

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
Cast house Operating Requirements	Part 63.1510(c)	The permittee must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace and in-line fluxer that identifies the applicable emission limits and means of compliance, including: (1) The type of affected source or emission unit (e.g., group 1 furnace, group 2 furnace, in-line fluxer); and (2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.	as required by the operational standard in §63.1506(b) are intact and legible.
4.5.f Cast house Operating Requirements	40 CFR Part 63.1506(d)and Part 63.1510(e)	Feed/Charge Weight For each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge, the permittee must:	For each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or ug/Mg (gr/ton) of feed/charge the permittee must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
And Monitoring and Compliance Requirements		(1) Except as provided in paragraph (3) of this Requirement, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; (2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan; and (3) The permittee may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that: (i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and (ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on	measurement device or procedure must be +/- 1 percent of the weight being measured. The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		aluminum production weight rather than feed/charge weight.	
4.5.g Cast house Operating Requirements And Monitoring and Compliance Requirements	40 CFR Part 63.1506(n); Part 63.1510(o); Part 63.1510(p); and Part 63.1510(q)	Group I Furnace without Add-on Air Pollution Control Devices The permittee must, for each group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices: (1) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test; (2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan; and (3) Operate each group 1 melting/holding furnace subject to the emission standards in §63.1505(i)(2)	The permittee must develop, in consultation with the applicable permitting authority, a written site-specific monitoring plan. The permittee must submit the site-specific monitoring plan to Ecology for review by September 24, 2002 or six months prior to startup, whichever is later. (1) The site-specific monitoring plan must be part of the OM&M plan that addresses monitoring and compliance requirements for PM, HCl, and D/F emissions; (2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards; (3) Each site-specific monitoring plan must include provisions for unit labeling as required in Requirement 4.5.e (40 CFR Part 63.1510(c), feed/charge weight measurement (or production weight measurement) as required in Requirement 4.5.f (40 CFR Part 63.1510(e) and flux weight measurement as required in Requirement 4.5.k (40 CFR Part 63.1510(j); (4) Each site-specific monitoring plan for a melting/holding furnace subject to the clean charge emission standard in §63.1505(i)(3) must include these requirements: (a) The permittee must record the type of feed/charge (e.g., ingot, thermally dried chips, dried scrap, etc.) for each operating cycle or time period used in the performance test; and (b) The permittee must submit a certification of compliance with the applicable operational standard for clean charge materials in §63.1506(n)(3) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(iv); (5) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include the following provisions for the demonstration and implementation of the program (40 CFR Part 63.1510(p)): (a) A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		using only clean charge as the feedstock.	(b) A scrap inspector training program; (c) An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples; (d) Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results; (e) A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and (f) Recordkeeping requirements to document conformance with plan requirements; and (6) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include the following provisions for the demonstration and implementation of the program (40 CFR Part 63.1510(q)): Any group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented) may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include: (a) Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test. (b) Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test. (c) Operating, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.
4.5.h Cast house Operating Requirements	40 CFR Part 63.1506(o) and Part 63.1510(r)	Group 2 Furnace For each new or existing group 2 furnace, the permittee must: (1) Operate each furnace	The permittee must: (1) Record a description of the materials charged to each furnace, including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents; and (2) Submit a certification of compliance with the applicable operational standard for charge materials for each 6-month reporting period. Each certification must

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
And Monitoring and Compliance Requirements		using only clean charge as the feedstock; and (2) Operate each furnace using no reactive flux.	contain the information in Requirement 4.5.hh (40 CFR Part 63.1516(b)(2)(v)).
4.5.i Cast house Operating Requirements	40 CFR Part 63.1506(p)	Corrective Action When a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee must initiate corrective action.	Whenever a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee's corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable, in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.
4.5.j Cast house Monitoring and Compliance Requirements	40 CFR Part 63.1510(b)	Operation, Maintenance, and Monitoring (OM&M) Plan The permittee must prepare and implement for each existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan.	The permittee shall submit the plan to Ecology for review and approval on or before the date of the initial performance test required by 4.5.p. Pending approval by Ecology of an initial or amended plan, the permittee must comply with the provisions of the submitted plan. Each plan must contain the following information: (1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device; (2) A monitoring schedule for each affected source and emission unit; (3) Procedures for the proper operation and maintenance of each process unit used to meet the applicable emission limits or standards in §63.1505; (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including: (i) Calibration and certification of accuracy of each monitoring device, at least once every 3 months, according to the manufacturer's instructions; and (ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of 40 CFR Part 63; (5) Procedures for monitoring process parameters, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used;

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			(6) Corrective actions to be taken when process or operating parameters deviate from the value or range established in number (1) above of this Requirement, including: (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed; (7) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance; and (8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in Requirement 4.5.n (40 CFR Part 63.1510(o)) for each group 1 furnace not equipped with an add-on air pollution control device. Any subsequent changes to the plan must be submitted to Ecology for review and approval.
4.5.k Cast house Monitoring and Compliance Requirements	40 CFR Part 63.1510(j)	Total Reactive Flux Injection Rate For all group 1 furnaces or in-line fluxers, the permittee must install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit. (i) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the	(1) The permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months. (2) For each operating cycle or time period used in the performance test, the permittee shall calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton using the procedure in Requirement 4.5.dd (40 CFR Part 63.1512(o)). (3) The permittee shall record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of: (i) Gaseous or liquid reactive flux other than chlorine; and (ii) Solid reactive flux. (4) The permittee shall, for each operating cycle or time period used in the performance test, calculate and record the total reactive flux injection rate using the procedure in Requirement 4.5.dd (40 CFR Part 63.1512(o)).

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		same operating cycle or time period used in the performance test. (ii) The accuracy of the weight measurement device must be +/- 1 percent of the weight being measured. The permittee may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of +/- 1 percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.	
4.5.1 Cast house Monitoring and Compliance Requirements	40 CFR Part 63.1510(s)	Site-specific Requirements for Secondary Aluminum Processing Units	(1) For each secondary aluminum processing unit the permittee must include, within the OM&M plan prepared in accordance with Requirement 4.5.j (40 CFR Part 63.1510(b)), the following information: (i) The identification of each emission unit in the secondary aluminum processing unit; (ii) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application; (iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			(iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and (v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in Requirement 4.5.m (40 CFR Part 63.1510(t)). (2) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions: (i) Any averaging among emissions of differing pollutants; (ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit; (iii) The inclusion of any emission unit while it is shutdown; or (iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations. (3) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the permittee must submit a request to Ecology containing the information required by paragraph (s)(1) of this section and obtain approval of Ecology prior to implementing any revisions.
4.5.m Cast house Monitoring and Compliance Requirements	40 CFR Part 63.1510(t)	Secondary Aluminum Processing Unit Except as provided in Requirement 4.5.n (40 CFR Part 63.1510(u)), the permittee must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis.	Daily, the permittee shall calculate the 3-day, 24-hour rolling average, by the following procedure: (1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in Requirement 4.5.f (40 CFR Part 63.1510(e)). If the permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis; (2) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds; (3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU;

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			(4) Compute the 24-hour daily emission rate using the following equation: $$E_{day} = \frac{\sum_{i=1}^{n}(T_i \times ER_i)}{\sum_{i=1}^{n} T_i}$$ Where, E_{day} = The daily PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period; T_i = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons); ER_i = The measured emission rate for emission unit i as determined in the performance test (lb/ton or ug/Mg of feed/charge); and n = The number of emission units in the secondary aluminum processing unit; and (5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.
4.5.n Cast house Monitoring and Compliance Requirements	40 CFR Part 63.1510(u)	Secondary Aluminum Processing Unit Compliance by Individual Emission Unit Demonstration As an alternative to the procedures of Requirement 4.5.m (40 CFR Part 63.1510(t)), the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the	

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		applicable emission limits for the emission unit.	
4.5.o Cast house Performance Test/ Compliance Demonstration General Requirements	40 CFR Part 63.1511(a); Part 63.7(b); and Part 63.7(c)	Site-specific Test Plan Prior to conducting a performance test required by this subpart, the permittee must prepare and submit a site-specific test plan meeting the requirements in §63.7(c).	The permittee shall submit the site-specific test plan to Ecology at least 60 calendar days before the performance test is scheduled to take place (simultaneously with the notification of intention to conduct a performance test required by 40 CFR Part 63.7(b)). The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data. The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples. The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. The PA's consist of blind audit samples provided by the Administrator and analyzed during the performance test in order to provide a measure of test data bias. The external QA program may also include systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.
4.5.p Cast house Performance Test/ Compliance Demonstration General Requirements	40 CFR Part 63.1511(b)	Initial Performance Test Following approval of the site-specific test plan, the permittee must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b).	Following approval of the site-specific test plan and prior to September 20, 2003 or within 180 days of startup, whichever is later, the permittee must adhere to the following instuctions: (1) Conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate. (2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours. (3) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		The permittee must conduct each performance test according to the requirements of the general provisions in subpart A of this part and this subpart.	operating cycle. (4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted for a period of time for all affected sources or emission units to complete 1 entire process operating cycle or for 24 hours, whichever is shorter. (5) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.
4.5.q Cast house Performance Test/ Compliance Demonstration General Requirements	40 CFR Part 63.1511(c)	Test Methods	The permittee must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards: (1) Method 1 for sample and velocity traverses. (2) Method 2 for velocity and volumetric flow rate. (3) Method 3 for gas analysis. (4) Method 4 for moisture content of the stack gas. (5) Method 5 for the concentration of PM. (6) Method 9 for visible emission observations. (7) Method 23 for the concentration of D/F. (8) Method 25A for the concentration of THC, as propane.
4.5.r Cast house Performance Test/ Compliance Demonstration General Requirements	40 CFR Part 63.1511(e)	Repeat Tests.	The permittee must conduct a performance test every 5 years following the initial performance test.
4.5.s Cast house Performance Test/ Compliance Demonstration	40 CFR Part 63.1511(g)	Establishment of Monitoring and Operating Parameter Values. The permittee must establish a minimum or maximum operating parameter value, or an	To establish the minimum or maximum value or range, the permittee must use the appropriate procedures in this section and submit the information required by Requirement 4.5.ff (40 CFR Part 63.1515(b)(4)) in the notification of compliance status report. The permittee may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of Ecology: (1) The complete emission test report(s) used as the basis of the parameter(s)

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
General Requirements		operating parameter range for each parameter to be monitored as required by §63.1510 that ensures compliance with the applicable emission limit or standard.	is submitted; (2) The same test methods and procedures as required by this subpart were used in the test; (3) No design or work practice changes have been made to the source, process, or emission control equipment since the time of the report; and (4) All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.
4.5.t Cast house Performance Test/ Compliance Demonstration Requirements and Procedures	40 CFR Part 63.1512(e)	Group 1 Furnace (including melting holding furnaces) Without Add-on Air Pollution Control Devices. In the site-specific monitoring plan required by Requirement 4.5.g (40 CFR Part 63.1510(o)), the permittee must include data and information demonstrating compliance with the applicable emission limits for each group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices. (1) If the group 1 furnace processes other than clean charge material, the permittee must conduct emission tests to measure emissions of PM, HCl, and D/F at the furnace exhaust outlet. (2) If the group 1 furnace processes only clean charge,	The permittee shall include in the site-specific test plan (Requirement 4.5.o) data demonstrating compliance with the applicable emission limits, conduct required performance tests (Requirement 4.5.p) and include in the OM&M plan (Requirement 4.5.j).

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		the permittee must conduct emission tests to simultaneously measure emissions of PM and HCl at the furnace exhaust outlet. A D/F test is not required. Each test must be conducted while the group 1 furnace (including a melting/holding furnace) processes only clean charge. (3) The permittee may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.	
4.5.u Cast house Performance Test/ Compliance Demonstration Requirements and Procedures	40 CFR Part 63.1512(h)	In-line Fluxer. (1) The permittee must conduct a performance test to measure emissions of HCl and PM at the outlet of the control device. If the in-line fluxer uses no reactive flux materials, emission tests for PM and HCl are not	The permittee shall include in-line fluxer performance testing in the site-specific test plan (Requirement 4.5.o), conduct required performance tests (Requirement 4.5.p) and include in the OM&M plan (Requirement 4.5.j).

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		required. (2) The permittee may choose to determine the rate of reactive flux addition to the in-line fluxer and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the in-line fluxer is emitted. Under these circumstances, permittee is not required to conduct an emission test for HCl.	
4.5.v Cast house Performance Test/ Compliance Demonstration Requirements and Procedures	40 CFR Part 63.1512(j)	Secondary aluminum processing unit. The permittee must conduct performance tests as described below in this Requirement. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and µg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in §63.1510(t). A performance test is required for:	The permittee shall include secondary aluminum processing unit performance testing in the site-specific test plan (Requirement 4.5.o), conduct required performance tests (Requirement 4.5.p) and include in the OM&M plan (Requirement 4.5.j).

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		(1) Each group 1 furnace processing only clean charge to measure emissions of PM and either: (i) Emissions of HCl (for the emission limit); or (ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard). (2) Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either: (i) Emissions of HCl (for the emission limit); or (ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard). (3) Each in-line fluxer to measure emissions of PM and HCl.	
4.5.w Cast house Performance Test/ Compliance Demonstration Requirements and Procedures	40 CFR Part 63.1512(k)	Feed/charge Weight Measurement.	During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the permittee, for each affected source or emission unit subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. If the permittee chooses to demonstrate compliance on the basis of the aluminum production weight, the permittee must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
4.5.x Cast house Performance Test/ Compliance Demonstration Requirements and Procedures	40 CFR Part 63.1512(o)	Flux Injection Rate.	The permittee must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate: (1) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs; (2) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs; (3) Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using the following equation: $W_t = F_1W_1 + F_2W_2$ Where, W_t = Total chlorine usage, by weight; F_1 = Fraction of gaseous or liquid flux that is chlorine; W_1 = Weight of reactive flux gas injected; F_2 = Fraction of solid reactive chloride flux that is chlorine (e.g., F = 0.75 for magnesium chloride; and W_2 = Weight of solid reactive flux; (4) Divide the weight of total chlorine usage (Wt) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and (5) If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
4.5.y Cast house Performance Test/ Compliance Demonstration Requirements and Procedures	40 CFR Part 63.1512(r)	Labeling. For each group 1 furnace, group 2 furnace and in-line fluxer, the permittee must submit the information described in Requirement 4.5.hh (40 CFR Part 63.1515(b)(3)) as part of the notification of compliance status report to document conformance with the operational standard in Requirement 4.5.e (40 CFR Part 63.1506(b)).	The permittee shall submit the compliance status report annually.
4.5.z Cast house Equations for Determining Compliance	40 CFR Part 63.1513(b)	Equations for Determining Compliance - PM, HCl and D/F Emission Limits	The permittee shall use the following equation to determine compliance with an emission limit for PM, HCl, and D/F: $$E = \frac{C \times Q \times K_1}{P}$$ Where, E= Emission rate of PM, HCl, or D/F, kg/Mg (lb/ton) of feed; C = Concentration of PM, HCl, or D/F, g/dscm (gr/dscf); Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); K_1 = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and P = Production rate, Mg/hr (ton/hr).

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
4.5.aa Cast house Equations for Determining Compliance	40 CFR Part 63.1513(d)	Equations for Determining Compliance - Conversion of D/F Measurements to TEQ Units.	To convert D/F measurements to TEQ units, the permittee must use the procedures and equations in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and –Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.
4.5.bb Cast house Equations for Determining Compliance	40 CFR Part 63.1513(e)(1)	Equations for Determining Compliance - Secondary Aluminum Processing Unit	The permittee shall use the following equation to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E_{cPM}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cPM}) calculated using the equation in Requirement 4.5.a (40 CFR Part 63.1505(k)(1)). $$E_{CPM} = \frac{\sum_{i=1}^{n} (E_{tiPM} \times T_{ti})}{\sum_{i=1}^{n} (T_{ti})}$$ Where, E_{cPM} = The mass-weighted PM emissions for the secondary aluminum processing unit; E_{tiPM} = Measured PM emissions for individual emission unit i; T_{ti} = The average feed rate for individual emission unit i during the operating cycle or performance test period; and n = The number of emission units in the secondary aluminum processing unit.
4.5.cc Cast house Equations for Determining Compliance	40 CFR Part 63.1513(e)(2)	Equations for Determining Compliance - Secondary Aluminum Processing Unit	The permittee shall use the following equation to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E_{cHCl}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cHCl}) calculated using the equation in Requirement 4.5.b. (40 CFR Part 63.1505(k)(2)).

II.4 Metal Products

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			$$E_{CHCl} = \frac{\sum_{i=1}^{n} (E_{tiHCl} \times T_{ti})}{\sum_{i=1}^{n} (T_{ti})}$$ Where, E_{cHCl} = The mass-weighted HCl emissions for the secondary aluminum processing unit; and E_{tiHCl} = Measured HCl emissions for individual emission unit i.
4.5.dd Cast house Equations for Determining Compliance	40 CFR Part 63.1513(e)(3)	Equations for Determining Compliance - Secondary Aluminum Processing Unit	The permittee shall use the following equation to compute the aluminum mass-weighted D/F emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit ($L_{cD/F}$) calculated using the equation in Requirement 4.5.c (40 CFR Part 63.1505(k)(3)). $$E_{CD/F} = \frac{\sum_{i=1}^{n} (E_{tiD/F} \times T_{ti})}{\sum_{i=1}^{n} (T_{ti})}$$ Where, $E_{cD/F}$ = The mass-weighted D/F emissions for the secondary aluminum processing unit; and $E_{tiD/F}$ = Measured D/F emissions for individual emission unit i.
4.5.ee Cast house Equations for Determining Compliance	40 CFR Part 63.1513(e)(4)	Equations for Determining Compliance - Secondary Aluminum Processing Unit	As an alternative to using the equations in Requirements 4.5.bb to 4.5.dd (40 CFR Part 63.1513(e)(1), (2), and (3)), the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in §63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in §63.1505(j).

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
4.5.ff Cast house Notifications	40 CFR Part 63.1515(b)	Notification of Compliance Status Report	By May 23, 2003 (within 60 days after the compliance date), the permittee must submit a notification of compliance status report. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in below. If the permittee submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include: (1) All information required in §63.9(h). The permittee must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests); (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system); (3) Unit labeling as described in Requirement 4.5.e (40 CFR Part 63.1506(b)), including process type or furnace classification and operating requirements; (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test; (5) Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device); and (6) Startup, shutdown, and malfunction plan, with revisions.
4.5.gg Cast house Reports	40 CFR Part 63.1516(a)	Startup, Shutdown, and Malfunction Plan/Reports. The permittee must develop and implement a written plan as described in	By March 23, 2003 or upon startup, whichever is later, the permittee shall develop a written plan that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the MACT emission standards.

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		§63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3).	In addition to the information required in §63.6(e)(3), the plan must include: (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
4.5.hh Cast house Reports	40 CFR Part 63.1516(b)	Excess Emissions/Summary Report. (1) A report must be submitted if any of these conditions occur during a 6-month reporting period: (a) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature,	As required by §63.10(e)(3), the permittee must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period. Each report must include each of these certifications, as applicable: (1) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: "Each group 1 furnace without add-on air pollution control devices subject to emission limits in §63.1505(i)(2) processed only clean charge during this reporting period." (2) For each group 2 furnace: "Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive,

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter). (b) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3). (c) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart. (d) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit. (2) The permittee must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.	non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period."

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
4.5.ii Cast house Reports	40 CFR Part 63.1516(c)	Annual Compliance Certifications. For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon the following conditions: (1) Any period of excess emissions, as defined in 40CFR Part 63.1516(b)(1), that occurred during the year were reported as required by this subpart; and (2) All monitoring, recordkeeping, and reporting requirements were met during the year.	
4.5.jj Cast house Records	40 CFR Part 63.1517(a)	Records As required by 40 CFR Part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart Subpart RRR). (1) The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance,	

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site. (2) The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and (3) The permittee may report required information on paper or on a labeled computer disk using commonly available and Ecology-compatible computer software.	
4.5.kk Cast house Records	40 CFR Part 63.1517(b)	Records In addition to the general records required by §63.10(b), the permittee must maintain records of: (1) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux),	

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		including records of any period the rate exceeds the compliant operating parameter value and corrective action taken; (2) For each continuous monitoring system, records required by §63.10(c); (3) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test; (4) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan; (5) Records of all charge materials for each group 1 melting/holding furnaces without air pollution control devices processing only clean charge; (6) Records of all charge materials and fluxing materials or agents for a group 2 furnace; (7) Records of monthly inspections for proper unit labeling for each affected	

II.4 Metal Products			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
		source and emission unit subject to labeling requirements; (8) Records of annual inspections of emission capture/collection and closed vent systems; (9) Records for any approved alternative monitoring or test procedure; (10) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: (i) Startup, shutdown, and malfunction plan; (ii) For major sources, OM&M plan; and (iii) Site-specific secondary aluminum processing unit emission plan (if applicable); and (11) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.	

II.5 Ancillary Operations

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
5.1 Bath crushing baghouse, equipment # 75001, 6000 cfm	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once two years and upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99) or EPA Method 301 Equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
5.2 Superstructure cleaning baghouse, equipment # 29170, 10000 cfm			
5.3.a Stud cleaning baghouse, 3000 cfm	Condition No. IV.2.A and IV.2.B of Order No. DE 98-AQI020 *WAC-173-400-060*	Particulate Material Emissions of particulate material must not exceed 0.005 grains/dscf; 9.3 lbs/day; and 1.7 tons/year	The permittee shall conduct an emission test once two years and upon Ecology's request. The reference test methods is EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/99) or EPA Method 301 Equivalent. Calculate the particulate material emission rate using the following equations: $E_{PPD} = C \times Q \times K$ Where: E_{PPD} = the emission rate of PM in lb/day; C = the concentration of PM in gr/dscf; Q = the volumetric flow rate of effluent gas in dscf/min; K = conversion factor 0.2057 lb-min/gr-day; $E_{TPY} = C \times Q \times K$ Where:

II.5 Ancillary Operations			
Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
			E_{TPY} = the emission rate of PM in tons/year; C = the concentration of PM in gr/dscf; Q = the volumetric flow rate of effluent gas in dscf/min; K = conversion factor 0.2057 ton-min/gr-year; Include all valid runs in the calculations. The permittee shall report results monthly, and all supporting data from calculation and units and dates tested on a summary sheet. Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
5.3.b Stud cleaning baghouse, 3000 cfm	Condition No. IV.2.C of Order No. DE 98-AQI020 *WAC 173-415-030(3)*	Visible Emissions Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period	Upon Ecology's request, the permittee shall conduct an emission test. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
5.3.c Stud cleaning baghouse, 3000 cfm	Condition No. IV.2.C of Order No. DE 98-AQI020	No visible emissions shall be present elsewhere in the system.	Comply with Condition 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]

II.5 Ancillary Operations

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Monitoring, Recordkeeping and Reporting
5.3.d Stud cleaning baghouse, 3000 cfm	Condition No. IV.3 of Order No. DE 98-AQI020	Operation & Maintenance Manuals Operation and maintenance manuals for all equipment that has the potential to effect emissions to the atmosphere shall be followed, reviewed regularly, updated as necessary, and available to Ecology. Emissions that result from a failure to follow the requirements of the O&M manual may be considered proof that the equipment was not properly operated and maintained.	The permittee shall keep on file the operation & maintenance manual and regular maintenance records. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
5.3.e Stud cleaning baghouse, 3000 cfm	Condition No. IV.4 of Order No. DE 98-AQI020	Inspections An inspection log of the baghouse shall be maintained.	The permittee shall conduct inspections of the stud handling baghouse and related collection ducts and hoods monthly.
5.3.f Stud cleaning baghouse, 3000 cfm	Condition No. IV.5 of Order No. DE 98-AQI020	Particulate Material At Ecology's request, conduct an emission test if visible emissions are observed or upon failure to maintain the inspection log. Submit emission test results within 30 days of emission test.	Upon Ecology's request, the permittee shall conduct an emission test if visible emissions are observed or upon failure to maintain the inspection log required in 4.2.d. The reference test method is EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/99). Submit emission test results within 30 days of emission test.

II.6 Maintenance Operations

Condition No.	Citation of Authority	Emission Limit or Work Practice Requirement	Means to Determine Compliance
6.1 Dust collector (carpenter shop), equipment # 49000, 4,300 cfm	WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]	Particulate Material Emissions of particulate material from any general process operations shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once every two years and upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99) or EPA Method 301 Equivalent. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. 1.1.a. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]
6.2 Baghouse, equipment # 59620, 10,000 cfm			

SECTION III: STANDARD TERMS AND CONDITIONS OF THE PERMIT

III.1. Duty to comply — WAC 173-401-620(2)(a)

The permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

III.2. Need to halt or reduce activity not a defense — WAC 173-401-620(2)(b)

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit."

III.3. Permit actions — WAC 173-401-620(2)(c)

This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

III.4. Property rights — WAC 173-401-620(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

III.5. Duty to Provide Information — WAC 173-401-620(2)(e)

The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205.

III.6. Permit fees — WAC 173-401-620(2)(f)

The permittee shall pay fees as a condition of this permit in accordance with Ecology's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW

III.7 Emissions Trading WAC 173-401-620(2)(g)

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

III.8 Severability Clause WAC 401-620(2)(h)

If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

III.9 Permit Appeals WAC 173-401-620(2)(i)

The permittee may appeal this permit or any conditions in it only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA.

III.10 Permit Continuation WAC 173-401-620(2)(j)

This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted.

III.11 Federally Enforceable Requirements WAC 173-401-625

All terms and conditions of this permit, including any provisions designed to limit potential to emit, are enforceable by EPA and citizens under the FCAA, unless they are specifically designated as not federally enforceable.

III.12 Reopening for Cause WAC 173-401-730

This permit shall be reopened and revised under any of the following circumstances:

(a) Additional applicable requirements become applicable when the remaining permit term is greater than three years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).
(b) Additional requirements (including excess emissions requirements) become applicable under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated in the permit.

(c) Ecology determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
(d) Ecology determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Procedures to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists.

III.13 Tampering and False Statements — WAC 173-400-105(7) and (8) and 40 CFR 70.11(a)

No person shall make any false materials statement, representation or certification in any form, notice or report required in this permit. No person shall render inaccurate any monitoring device or method required under this permit.

SECTION IV: GENERAL TERMS AND CONDITIONS OF THE PERMIT:

Recordkeeping Terms & Conditions

IV.1 Monitoring Records — WAC 173-401-615(2)(a) and WAC 173-400-105

The permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:
(i) The date, place as defined in the permit, and time of sampling or measurements;
(ii) The date(s) analyses were performed;
(iii) The company or entity that performed the analyses;
(iv) The analytical techniques or methods used;
(v) The results of such analyses; and
(vi) The operating conditions existing at the time of sampling or measurement;

IV.2 Inspection Checklists — WAC 173-401-615(1)(b)

Where the permittee is required to use and maintain an inspection checklist, the checklist must contain, at a minimum, the following information:

(i) The person conducting the inspection
(ii) The date/time of the inspection
(iii) Location of the inspection
(iii) The observations made during the inspection
(iv) Corrective actions taken if any
(v) The date and time corrective action was initiated and completed

IV.3 Changes at Source WAC 173-401-615(2)(b)

The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

IV.4 Records Retention WAC 173-401-615(2)(c)

The permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all data from continuous monitoring instrumentation, and copies of all reports required by this permit.

IV.5 Recording of Permit Deviations WAC 173-401-615(3)(b)

The source shall maintain a contemporaneous record of all deviations including the date and nature of the deviation.

Reporting Terms & Conditions

IV.6 Certifications WAC 173-401-520

Any application form, report, or compliance certification submitted pursuant to Chapter 173-401 WAC shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 173-401 WAC shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IV.7 Monthly Reports WAC 173-401-615(3)(a) and WAC 173-415-060

Results of monitoring shall be reported within 30 days of the last calendar day of each month. All instances of deviations from permit requirements must be clearly identified in such reports.

IV.8 Permit Deviations/Excess Emissions WAC 173-401-615(3)(b) and WAC 173-400-107

The permittee shall promptly submit a report of any deviations from permit conditions.

A. For purposes of this permit, submitting a report "promptly" means the following: (1) if the deviation presents a potential threat to human health or safety, the report shall be made as soon as possible but no later than 12 hours after the discovery of the deviation; (2) for other deviations, "promptly" means that the deviations are identified in the respective monthly report.
B. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The permittee may include in its reports demonstrations

that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107.

IV.9 Emission Inventory	WAC 173-415-080 and WAC 173-400-105(1)

The permittee shall submit an inventory of emissions, as specified in WAC 173-415-080, from the source each year no later than 105 days after the end of the calendar year. The permittee shall maintain records of information necessary to substantiate any reported emissions.

IV.10 Compliance Requirements/Certification	WAC 173-401-510(2)(h)(iii), WAC 173-401-600, WAC 173-401-630(3), and WAC 173-401-630 (5)

A. The permittee shall continue to comply with applicable requirements with which the permittee is in compliance;
B. The permittee shall meet applicable requirements that will become effective during the permit period on a timely basis;
C. The permittee shall submit a report to the Department of Ecology and to Region 10 of EPA 12 months after the effective date of this permit and annually thereafter certifying compliance with the terms and conditions contained in this permit. The certification shall describe the following:
   i. the permit term or condition tht is the basis of the certification;
   ii. the compliance status;
   iii. whether compliance was continuous or intermittent; and
   iv. the methods used for determining compliance, currently and over the reporting period consistent with required monitoring.
D. The permittee is not required to certify compliance for insignificant emission units or activities. [WAC 173-401-530(2)(d)]

IV.11 Report Address

All reports, renewal applications, and compliance certifications required by this permit shall be submitted to:

Department of Ecology
Industrial Section
P.O. Box 47706
Olympia, WA 98504-7706

Compliance certification shall also be submitted to:

Environmental Protection Agency
Air Operating Permits, Region 10
1200 Sixth Avenue, OAQ-108
Seattle, WA 98101-1128

Other Terms & Conditions of the Permit

IV.12 Asbestos — WAC 173-400-075

The permittee shall comply with 40 CFR Part 61, subpart M (asbestos NESHAP) and WAC 173-400-075 when conducting any renovation or demolition at the facility.

IV.13 Concealment and Masking — WAC 173-400-040(7)

The permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit.

IV.14 Inspection and Entry — WAC 173-401-630(2)

Inspection and entry. The permittee shall allow the permitting authority or an authorized representative to perform the following upon presentation of credentials and other documents as may be required by law:
(a) Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
(c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
(d) As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

IV.15 Application and Issuance of a Renewal Permit — WAC 173-401-710(1)&(2)

The permittee shall submit a complete permit renewal application to Ecology no later than six months, but no earlier than 18 months, prior to the expiration date of the existing permit. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review that apply to the initial permit.

IV.16 Stratospheric Ozone Protection	40 CFR Section 82 and RCW 70.94.970 (the RCW is a state-only requirement)

A The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditions (MVACs) in Subpart B:
   i. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
   ii. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
   iii. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to § 82.161.
   iv. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166 ("MVAC-like appliance" is defined at § 82.152.)
   v. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
   vi. Owners/operators of appliances normally containing 50 or more pounds or refrigerant purchased and added to such appliances pursuant to § 82.166."

B Permittee may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SANP), 40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program. [40 CFR 82.174]

C Any certified technician employed by Permittee shall keep a copy of their certification at their place of employment. [40 CFR 82.166(1)]

D The Permittee shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere. [RCW 7070.94.970(2), 970(4)] State Only

E Compliance with this term and condition will be demonstrated by using a certified contractor or employee.

IV.17 Insignificant Emission Units	WAC 173-401-530(2)(b)

The generally applicable requirements that apply to IEUs are, WAC 173-415-030, WAC 173-400-040, WAC 173-400-050(1) & (3), and WAC 173-400-060.

IV.18 Providing Additional Data	WAC 173-415-060(2)

For Ecology to evaluate a plant's emissions or emission control program, each primary aluminum plant shall furnish other data requested by Ecology.

SECTION V: PERMIT SHIELD/ INAPPLICABLE REQUIREMENTS

Pursuant to WAC 173-401-640(1), compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified in this permit, as of the date of permit issuance. This permit shield does not exempt the permittee from requirements enacted after the permit issuance date. This permit shield shall not apply to any insignificant emission unit or activity designated under WAC 173-401-530. [WAC 173-401-530]

Pursuant to WAC 173-401-640(2), the Department of Ecology has determined that the requirements listed below do not apply to the facility, as of the date of permit issuance, for the reasons specified.

INAPPLICABLE REQUIREMENTS	
Regulatory Citation	**Reason for Inapplicability**
40 CFR 60, Subpart S Standards of Performance for Primary Aluminum Reduction Plants	The facility was constructed before October 23, 1974 and was not modified or reconstructed after that date.
RCW 70.94.610 Burning Used Oil Fuel in Land-based Facilities	The facility does not burn used oil.
RCW 70.94.650 Burning Permits for Weed Abatement, Fire Fighting Instruction and Agricultural Activities	The facility does not engage in any of the covered burning activities.
RCW 70.94.743 Outdoor Burning--Areas Where Prohibited	The facility does not conduct outdoor burning
RCW 70.94.775 Outdoor Burning--Fires Prohibited—Exceptions	The facility does not conduct outdoor burning
WAC 173-400-050(2) (9/20/93) Emission Standards for Incinerators	None of the facility's emission units are "incinerators" as that term is defined in WAC 173-400-030.
WAC 173-400-120 Bubble Rules	The facility has not applied for a bubble.
WAC 173-400-131 Issuance of Emission Reduction Credits	The facility has not applied for emission reduction credits.
WAC 173-400-136 Use of Emission Reduction Credits	The facility does not have and has not used emission reduction credits.
WAC 173-400-151 (9/20/93) Retrofit Requirements For Visibility Protection	The facility has not been determined to cause or contribute to a visibility impairment.
Chapter 173-421 WAC Emission Control Systems	The facility does not perform work on motor vehicle emission systems.
Chapter 173-425 WAC (9/17/90) Open Burning	The facility's operations do not include open burning.
Chapter 173-433 WAC (9/17/90) Solid Fuel Burning Device Standards	The facility's emission units are not "solid fuel burning devices" as defined in WAC 173-433-030(9).
Chapter 173-434 WAC (9/17/90) Solid Waste Incinerator Facilities	None of the facility's emission units are incinerators burning a solid waste fuel, within the meaning of WAC 173-434-030.
WAC 173-490-030 (2/19/91) Registration and Reporting--Petroleum liquid storage tanks.	The facility does not have any petroleum liquid storage tanks.
WAC 173-490-040(2) (2/19/91) Petroleum Liquid Storage Tanks	The facility does not have any petroleum liquid storage tanks.
WAC 173-490-040(6) (2/19/91) Surface Coaters	It does not apply to any of the emission units at the facility.
WAC 173-490-040(7) (2/19/91) Open Top Vapor Degreasers	It does not apply to any of the emission units at the facility.
WAC 173-490-040(8) (2/19/91) Conveyorized Degreasers	It does not apply to any of the emission units at the facility.

INAPPLICABLE REQUIREMENTS	
Regulatory Citation	**Reason for Inapplicability**
WAC 173-490-040(9) (2/19/91) Cutback Asphalt Paving	The facility does not engage in the activity subject to requirements of this subsection.
WAC 173-490-040(10) (2/19/91) Cold Cleaners	It does not apply to any of the emission units at the facility.
WAC 173-490-080 (2/19/91) Exceptions and Alternative Methods	Subsection (1) not applicable because facility has not applied for an alternative emission reduction method. Subsection (2) The facility does not have a gas-fired incinerator used to comply with the requirements of this chapter.
WAC 173-490-201 (2/19/91) Petroleum Liquid Storage In External Floating Roof Tanks	The facility does not have any petroleum liquid storage tanks.
WAC 173-490-205 (2/19/91) Surface Coating of Miscellaneous Metal Parts and Products	The facility does not engage in the surface coating of metal parts or products.
PSD Permit No. PSD-X80-13 (July 18, 1980) and Ecology Order DE 80-113	The six prototype pre-bake reduction cells authorized by this permit and order have since been removed.
PSD Permit No. PSD-X83-06 (Sept. 30, 1983)	The permitted project was never constructed.
Ecology Order DE 81-490 Fan Regulatory Order	By its own terms the order expired on January 31, 1985.
Ecology Order DE 87-233 Door Closure/Maintenance	The requirement was met by submittal of cell door operating procedure and training program and cell door inspection, maintenance and reporting program. Kaiser submitted plans on Sept. 1, 1987, w/supplemental information on Oct. 2, 1987.
Ecology Order DE 90-I035 Request Monitoring Plan	The requirement was met by submittal of updated monitoring plan. Kaiser has submitted monitoring plan.
Ecology Order DE 90-I084 and amendments PM_{10} Reduction	The this order was amended by Ecology Order DE 95-AQ1032 to modify or eliminate requirements that were satisfied, that were redundant, or that were no longer applicable.
Ecology Order DE 92-AQI022 (1st Amendment) Operating & Maintenance Plant for Air Pollution Control Equipment	The requirement was met by submittal of O&M plan for all operational pollution control equipment. Kaiser submitted plan 9-30-92.
Ecology Order DE 92-AQI074 RACT Analysis	The requirement was met by submittal of RACT analysis of all emission sources for VOC's, carbon monoxide and PM-10. Kaiser has submitted RACT analysis.
FCAA Title IV, Acid Deposition Control	Not applicable because the Kaiser-Tacoma Plant has not volunteered to participate.
FCCA section 183(e) Standards for VOC-emitting Products	Not applicable because the Kaiser-Tacoma Plant is not a "regulated entity" within the meaning of FCAA section 183(e)(1)©, and because EPA has not promulgated any rules under section 183(e) that regulated primary aluminum smelters.
FCCA section 328 Standards to control air pollution from outer continental shelf sources	Not applicable because the Kaiser-Tacoma Plant is not an "Outer Continental Shelf Source" within the meaning of FCAA section 328(a)(1).
40 CFR 63.843 (a)(1)(i), (ii), (iii), (iv), (v), (v) and 843(a)(2)(ii), (iii)	Not applicable to HSS plants.

INAPPLICABLE REQUIREMENTS	
Regulatory Citation	**Reason for Inapplicability**
40 CFR 63.843(c)	Facility does not have an anode bake furnace.
WAC 173-400-070 Emission standards for certain source categories	None of the listed categories are found at the Kaiser-Tacoma Works.
WAC 173-400-105(5) Continuous monitoring and reporting	None of the listed categories are found at the Kaiser-Tacoma Works.
WAC 173-400-115 Standards of performance for new sources	The facility was constructed before October 23, 1974 and was not modified or reconstructed, as defined by NSPS, after that date.
WAC 173-406 Acid Rain Regulation	Not applicable because the Kaiser-Tacoma Plant in not an "affected source" within the meaning of WAC 173-406-101(9).
Chapter 173-422 WAC Motor Vehicle Emissions	Not applicable because applicable requirements apply only to "emission units in a Chapter 401 source," per WAC 173-401-200(4), and motor vehicles are not "emission units," as defined in WAC 73-401-200(11).
Chapter 173-430 WAC Agricultural Burning	Not applicable because there are no "agricultural operations," as defined in WAC 173-430-020(1), at the Kaiser-Tacoma Plant
Ecology Order No. DE 91-I055 Construction Approval of Paste Plant Baghouse	Not applicable because the terms and conditions of this order were rescinded by Order No DE 98-AQI020.
Ecology Order No. DE 92-AQI043, First Amendment, Construction Approval for Line IV Vacuum Baghouse	Not applicable because the terms and conditions of this order were rescinded by Order No DE 98-AQI020.
Ecology Order No. DE 95-AQI041 Construction Approval for Rod Mill Mist Eliminator	Not applicable because the terms and conditions of this order were rescinded by Order No DE 98-AQI020.
Ecology Order No. DE 96-AQI023 Construction Approval for Stud Cleaning Baghouse	Not applicable because the terms and conditions of this order were rescinded by Order No DE 98-AQI020.
Ecology Order No. DE 97-AQI018 Construction Approval for Rod Mill No. 1 Melting Furnace	Not applicable because the terms and conditions of this order were rescinded by Order No DE 98-AQI020.

SECTION VI: ABBREVIATIONS

avg	average
BACT	best available control technology
BTU	British thermal unit
CEM	continuous emission monitor
CO	carbon monoxide
DOE	Department of Ecology
dscf	dry standard cubic foot
EPA	Environmental Protection Agency
FCAA	Federal Clean Air Act
gpm	gallons per minute
gt&c	general terms and conditions
g/m^3	grams per cubic meter
gr	grain
HAP	hazardous air pollutant
IEU	insignificant emission unit
kg	kilogram
lbs	pounds
MACT	maximum available control technology
$\mu g/m^3$	micrograms per cubic meter
MMBTU	million British thermal units
NOx	nitrogen oxides
NSPS	new source performance standards
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in diameter
POM	polycyclic organic matter
ppm	parts per million
ppmdv	part per million dry volume
PSD	prevention of significant deterioration
RCW	Revised Code of Washington
RACT	reasonable available control technology
SERP	source emission reduction plan
SIP	state implementation plan
SO_2	sulfur dioxide
tpy	tons per year
U.S.C.	United States Code
VOC	volatile organic compound
VE	visible emissions
WAC	Washington Administrative Code